Schools, Districts, and States Transform Seat-based Requirements into Competency-based Pathways to College- and Career-Readiness

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Secretary of Education Arne Duncan, in addressing the "new normal" schools are facing – tight budget times that call for doing more with less and finding ways to innovate, increase efficiency and effectiveness, and accelerate reform – released promising practices last March to help states, districts, and schools meet this extraordinary challenge. The Department, in furthering the Secretary's efforts, offered a set of additional innovative approaches and best practices, Increasing Educational Productivity, last May.

At the top of the ideas for increasing productivity is moving ahead with efforts to personalize learning, leaving behind an instructional system modeled on the American factory of the 20th century, one predicated on sorting out achievers from non-achievers. The advantages of individualized approaches, such as one-to-one tutoring, have been known since the 1980s, when Benjamin Bloom identified the 2 sigma problem. However, the costs of implementing them on a large scale have been prohibitive. With the recent advances in educational technology, American public schools increasingly have the means to respond to individual needs and learning styles and to turn the heretofore constants of time, place, pace, and curriculum into variables. The key, however, is to avoid the temptation of using technology as "high-tech reproduction of current practice," as Secretary Duncan observed in his remarks on the "new normal." Instead, technology can provide "each person the tools they need to be more successful."

What is personalized learning?

Education leaders who gathered in Boston in August 2010 to consider the redesign of our K-12 education system characterized it as "revers(ing) the traditional model that views time and place (that is, seat time) as the constant and achievement as the variable." Personalized learning, according to the report from their deliberations, "Innovate to Educate: System [Re]Design for Personalized Learning," "ensures all students gain proficiency independent of time, place, and pace of learning," and requires a major shift in focus from an instruction/teacher-centered approach to an authentic, student-centered approach. The Department of Education, in "Transforming American Education: Learning Powered by Technology" (2010), added to the understanding of personalized learning, observing that it is "instruction that is paced to learning needs [i.e., individualized], tailored to learning preferences [i.e., differentiated], and tailored to the specific interests of different learners." The learning objectives and content, as well as the method, may all vary in a fully personalized learning environment.

The education leaders convened in Boston by the Council of Chief State School Officers, ASCD, and the Software & Information Industry Association took the definition further by identifying 18 attributes of a personalized learning system, and from among them, these top five essential elements:

1. Flexible, Anytime/Everywhere Learning
2. Redefine Teacher Role and Expand "Teacher"
3. Project-Based/Authentic Learning Opportunities
4. Student Driven Learning Path
5. *Mastery/Competency-Based Progression/Pace*

Gaining competency over occupying a seat

Mastering content and skills, demonstrating competency, and moving forward at an individual pace is not a new concept. It was nearly two decades ago that the National Time and Learning Commission noted the dangers of valuing "seat time" over genuine proficiency in academic subjects. Of late, however, the National Center on Time & Learning (NCTL,) in its 2011 report, "Learning in America: Trends to Reform the American School Calendar," reports that "many states and districts are taking concrete steps that will … re-calibrate the education system by holding mastery for each individual student as the true measure of schooling." And that, according to CCSSO executive director Gene Wilhoit, bodes well for the new era of Common Core State Standards. "We have the unprecedented opportunity to focus on measuring each student's progress towards known goals," he told the "Innovate to Educate" symposium participants, encouraging them to seize the opportunity of defining an "optimum learning experience for every child …"

Susan Patrick and Chris Sturgis, in another 2010 report, "When Success Is the Only Option: Designing Competency-Based Pathways for Next Generation Learning," suggest a three-part working definition as the outline for a set of critical design principles of a "competency-based pathway": students advancing upon mastery; explicit and measurable learning objectives that empower students; and assessment that is meaningful and a positive learning experience for students. Their choices of the terms "competency-based" and "pathways" were intentional, noting that the former is used in the federal Race to the Top competition and advocating the latter as an alternative to "system" since "there is no reason nor is it viable to try to fully replace the traditional time-based system in its entirety." As an alternative, Patrick and Sturgis identify and explore conditions under which innovators and early adopters of competency-based policies and programs can "complement and inform the traditional, time-based system."

Competency-based efforts at the state, regional, and local levels

State-level efforts in New Hampshire, Michigan, and Ohio are highlighted in OII's Competency-Based Learning section of the Increasing Educational Productivity guide, and another state, Oregon, gives districts latitude to develop "proficiency-based standards" as well as assessments based on a protocol that calls for clear definitions from districts for student knowledge and skills based on standards, a definition of proficiency vis-à-vis those standards, and details as to what will constitute the quantity and quality of evidence that clearly demonstrates proficiency. As reported in NCTL's recent report, this proficiency-based approach is allowing Oregon districts such as Klamath Falls City Schools to not only expand learning opportunities for students, but to also permit the district "to do so at little to no additional cost because they can take advantage of community." Local businesses and community organizations, for example, act as mentors for students who complete a 25-hour experience that has clear learning expectations and allows students to demonstrate their proficiency outside of the school building.

The New England Network for Personalization and Performance (Network) is a partnership among the Center for Secondary School Redesign, based in Rhode Island, and several school districts in four other New England states – Maine, Massachusetts, New Hampshire, and Vermont – that envision high schools as places where learning can happen anytime and anyplace and where students demonstrate learning through complex and rigorous performance assessments. Last year, the Network was awarded an i3 development grant to pursue its hypothesis that a network of schools – 13 high schools serving nearly 11,000 students – working together to create authentic tasks and common rubrics to measure uncommon assessment tasks will foster personalized learning that results in higher student achievement. Success will be measured by a combination of outcomes including lower dropout rates, higher graduation rates, and demonstrated success after high school.

At Laconia High School, one of nine New Hampshire schools participating in the i3 project, principal Steve Beals is expanding the school's currently limited use of extended learning opportunities to all of the rural school's nearly 700 students. In an Education Week article last July, Beals cited the example of a Laconia student who explored "the role of a pharmacist under the direction of a pharmacy director four or five hours each week," under the guidance of her biotechnology teacher. Beals and the other principals in the Network

are committed to such inquiry-based approaches that are student-centered and teacher-guided. "There are multiple ways to show kids have learned the material and are competent in the subject matter," he observed.

For the nine New Hampshire high schools involved, the Network effort will allow them to build on an existing state policy environment that encourages high school redesign based on elimination of the Carnegie Unit in favor of a competency-based system focused on personalized learning, strong teacher-student relationships, flexible supports, and development of 21st century skills. An added benefit of the i3-grant support for all the participating high schools is the opportunities that teachers in the Network have to visit other schools and to observe inquiry-based learning. It is particularly helpful for teachers from the mostly rural schools, according to the Pittsfield Public Schools superintendent John Freeman, whose New Hampshire district serves 600 students. The Pittsfield Middle High School offers many subjects that are taught by one teacher, thus eliminating opportunities for peer interaction. The i3 grant, according to Freeman, allows his teachers to connect with others in the Network. Moreover, the Center for Secondary School Redesign, in its facilitative role, provides two coaches for each Network school, and they have helped to create teams within the schools that are spearheading the redesign efforts.

Taking a RISC on competency-based learning

More than a decade ago, school leaders in Alaska's Chugach School District sought to change a dispirited situation: ninety percent of their students could not read at grade level and only one student had graduated from college in more than two decades. The situation called for radical change. Under the leadership of then superintendent Roger Sampson, who later become Alaska's state superintendent (and today leads the Education Commission of the States), grade levels were abolished in favor of a series of 10 competency-based levels; students would progress only upon mastery of standards-based content and skills, not by age and traditional grade levels. According to another former Chugach superintendent, Richard De Lorenzo, "We give kids the road map; they figure out how they learn best." The approach showed not just positive but dramatic results.

After the first five years, student achievement, as measured by the California Achievement Test, climbed to the 72nd percentile; by 2000, a majority of Chugach students were taking college-entrance exams and more recently, approximately 90 percent of Chugach graduates were going on to college or the military. The effort garnered the Chugach district a Malcolm Baldridge National Quality Award and attracted the support of the Bill & Melinda Gates Foundation, which allowed for growth of the model to a number of other Alaska districts – four additional ones by 2002, and three more districts and four secondary schools by 2007. The effort became the Re-Inventing Schools Coalition (RISC) and, by 2007, it was attracting attention in the lower 48 states.

Personalized mastery is at the heart of the RISC model, but based on its success in the Alaska districts, DeLorenzo and his partners professed the essentialness of four interrelated components – a shared vision, standards-based design, leadership, and continuous improvement. In 2007, the Lindsay Unified Schools, a district of 4,100 students in central California, adopted a strategic design that resulted from the engagement of more than 150 community stakeholders, many of them parents. Their shared vision was to make a clean and complete break from the "traditional system." Without yet encountering RISC, Lindsay conceived a standards-based approach that scrapped grades in favor of content mastery levels and replaced traditional A through F grades with a three-level rubric assessment system, in which three signifies acquisition of complex (as opposed to basic) knowledge in core subjects. Lindsay school leaders launched the new approach in the 2008-09 school year with a new curriculum and contracted with RISC after realizing that the tools it offered were right for the job ahead of them, including implementation of RISC's four key components.

Implementation began in the district's high school with its 10thgraders in 2009-2010. There are promising signs: Results for the state assessments in English language arts (ELA) and science taken by graduating ninth graders have climbed consistently and significantly in both 2010 and 2011 – from 27 percent of students scoring proficient in ELA in 2009 to 43 and 47 percent, respectively, in 2010 and 2011. In science,

the number of students scoring proficient increased by half, from 24 percent to 33 percent. This school year, Lindsay implemented its competency-based model in grades K through 11, having joined it to a system-wide change to six K-8 schools that replaced a longstanding elementary-to-junior-high-school structure.

The district has high hopes for its competency-based system, according to Tom Rooney, its assistant superintendent for curriculum and instruction. The traditional system "was not honest with students, parents, and society." Passing students from grade to grade with Cs or Ds, according to Rooney, only perpetuates low expectations and results in students unprepared for college and careers by high school graduation (if they make it that far). In its new approach, Lindsey students move to a new level only after demonstrating Level 3 proficiency in the new assessment system. Basic knowledge – a C or D grade in the old paradigm – leads now to more help on an individual basis to make sure students achieve mastery and then move on, prepared to tackle the new content level.

Students taking ownership of their learning is a conscious outcome for Lindsay and other districts that have adopted competency-based learning. A Lindsay parent said this about the change: "The performance-based system … affords our daughter opportunities that the traditional system couldn't offer. Academics have always come easy for her, so we often found her at the 'head of the class' with little or no effort. … The new system requires that she take charge of her learning, problem solve the challenges, and most of all, be an active participant in her educational experience."

Continuing the momentum

Last March, the International Association for K-12 Online Learning (iNACOL) and CCSSO brought together local- and state-level innovators at the Competency-Based Learning Summit to identify barriers and opportunities for expediting capacity-building to scale-up competency-based policies and practices. From that convening, several documents outline the lessons learned about competency-based school designs and reform policies ("It's Not a Matter of Time") as well as state-level strategies to implement needed policy frameworks ("Cracking the Code"). And, to ensure continued momentum towards a re-engineered learning system in which failure is not an option, iNACOL and several partners created a wiki to collect and share knowledge on competency-based innovations at the classroom, school, district, and state levels.

The increasing interest in and, more importantly, actions to implement competency-based learning are essential to the "rethinking of the status quo" that will be required of innovators, despite the challenges of the "new normal," if America is going to graduate many more students, on time and truly ready for college and careers.